AMENDMENTS TO THE CLAIMS

This Listing of Claims will replace all prior versions, and listings, of claims in this application.

Listing of Claims:

1.   (Currently Amended) A method of communication between a client computer and a server computer to receive a desired file in response to a user's selection of a hyperlink displayed by a browser, the server computer being connected to the client computer by a communications network, the method comprising the steps of:

(a)   receiving, at the client, the user's selection of the hyperlink, the hyperlink displayed by the browser being associated with a logical reference contained in a parent file, the parent file having been interpreted by the browser to display the hyperlink, the logical reference uniquely identifying the desired file independently of ~~an~~ any electronic address at which the desired file is located;

(b)   identifying an electronic address corresponding to the logical reference; and

(c)   receiving, at the client, the desired file identified by the logical reference.

2.   (Previously Presented) The method of claim 1, wherein the identifying step is performed at the client by reference to a list of physical references at the client, the list of physical references identifying a plurality of electronic addresses corresponding to the logical reference.

3.   (Original) The method of claim 2, wherein the identifying step is performed at the client by a program for selecting a server and the method further comprises the step of:

(d)   receiving at the client the program for selecting a server.

4.   (Previously Presented) The method of claim 3, further comprising the step of:

(e)   receiving at the client a parent file containing the logical reference.

wherein step (d) is performed during step (e); and step (e) is performed before step (a).

5.   (Previously Presented) The method of claim 2, wherein the list of physical references is appended to the parent file.

6.   (Currently Amended) The method of claim 2, wherein the server modifies the parent file to include the list of physical references before transmitting the parent file to the client, responsive to the user's selection of the hyperlink.

7.   (Previously Presented) The method of claim 6, wherein the server transmits a program for selecting a server to the client.

8.   (Original) The method of claim 7, wherein the server modifies the parent file to include the server selection program.

9.   (Original) The method of claim 7, wherein the server computer modifies the parent file to include a reference to the server selection program before transmitting the parent file to the client.

10.   (Currently Amended) A method of communication between a client computer and a server computer to receive a parent file in response to a user's selection of a hyperlink displayed by a browser, the server computer being connected to the client computer by a communications network, the method comprising the steps of:

(a)   receiving, at the server, a request for transfer to a client of the parent file containing a logical reference uniquely identifying a desired file independently of an electronic a network address at which the desired file is located, the request being in the form of a physical reference;

(b)   modifying the parent file, at the server, by inserting therein a list of physical references corresponding to each logical reference; and

(c)   transmitting, from the server to the client, the modified parent file.

11.   (Previously Presented) The method of claim 10, wherein the method further comprises the step of:

(d)   modifying the parent file, at the server, by inserting therein a program for selecting a server.

12.   (Previously Presented) The method of claim 10, wherein the method further comprises the step of:

(d)   modifying the parent file, at the server, by embedding therein a

reference to a program for selecting a server.

13.   (Previously Presented) The method of claim 12, wherein the method

further comprises the step of:

(e)   transmitting, from the server to the client, the program.

14.   (Currently Amended) A method for communication between a client

computer and a server computer to receive a desired file in response to a user's

request of a hyperlink displayed by a browser, the server computer being connected

to the client computer by a communications network, the method comprising the

steps of:

(a)   requesting, at a client, transmission of a parent file to the client, the

parent file comprising a logical reference, the logical reference uniquely identifying a

file independently of ~~an electronic~~ a network address ~~at which the file is located~~;

(b)   receiving the parent file at the client, the parent file comprising a list of

electronic addresses corresponding to the logical reference;

(c)   identifying, at the client, an electronic address from the list of

electronic addresses, the electronic address identifying a server and the location of

the file on the server; and

(d)   requesting transmission of the file from the server to the client using

the electronic address identified in step (c) .

15.   (Previously Presented) The method of claim 14, further comprising the

step of:

(e)   receiving a program for selecting a server, step (e) being performed

before step (c) .

16.   (Currently Amended) A client computer comprising:

a memory for storing programs and data;

a processor for executing programs;

a parent file, stored in the memory and interpretable to display a hyperlink,

the parent file containing a logical reference uniquely identifying a desired file

independently of ~~an electronic~~ a network address ~~at which the desired file is located~~;

a list of physical references, stored in the memory, listing at least one

electronic address for each logical reference in the parent file; and

a program, stored in the memory, for selecting a server responsive to a

request for the desired file identified by the logical reference in the parent file, the

program requesting the desired file using an electronic address from the list

indicating the desired file's location on the selected server, and to repeatedly select

an alternate server and submit an alternate request if the desired file is irretrievable

from the selected server until the desired file is transmitted to the client or until the

desired file has been requested from all servers identified in the list.

17.   (Original) The client of claim 16, wherein the server selection program

selects a server which is most likely to provide a fastest response time.

18.   (Previously Presented) The client of claim 17, wherein the server

selection program selects an alternate server which is most likely to provide a next-

fastest response time, if the first-selected server fails to begin transmission of the

desired file to the client within a predetermined amount of time.

19.   (Original) The client of claim 18, wherein the program for selecting a

server is comprises an instructional applet written in the Java programming

language.

20.   (Original) The client of claim 19, wherein the applet employs object

signing technology to open connections to various servers and to save its state on a

storage device on the client.

21.   (Original) The client of claim 20, wherein the server selection program

determines a server's expected response time on the basis of the server's times for

response to past requests from the server selection program.

22.   (Currently Amended) A server computer comprising:

a memory for storing programs and data;

a processor for executing programs;

a program, stored in the memory and executable by the processor, for

transmitting, responsive to a request therefor, a parent file containing a logical

reference uniquely identifying a desired file independently of an electronic a network

address at which the desired file is located, the program being capable of modifying

the parent file by inserting a list of electronic addresses corresponding to the logical

reference contained in the parent file before transmitting the parent file to the client.

23.   (Original) The server of claim 22, wherein the server stores in the memory a replication directory associating logical references to files with electronic addresses of the files stored on a plurality of servers, the list of electronic addresses being excerpted from the replication directory.

24.   (Previously Presented) The server of claim 23, further comprising a second program for modifying the parent file by inserting a program for selecting a server upon a request for a certain desired file identified by a logical reference before transmitting the parent file.

25.   (Previously Presented) The server of claim 23, further comprising a second program for modifying the parent file by inserting a reference to a program for selecting a server upon a request for a certain desired file identified by a logical reference before transmitting the parent file to the client.

26.   (Original) The server of claim 25, further comprising a third program for identifying a status of each server identified in each electronic address in the replication directory as either a parent or child of the server in a genealogy tree representing servers storing the file.

27.   (Original) The server of claim 26, further comprising a fourth program for tracking the server's load and to autonomously determine when, on the basis of the server's load, to delete one of the server's files, to delete the file, to update the server's replication directory to remove the electronic address of the file on the server, and to propagate an update request to all parent and children of the server in

the replication directory requesting the parent and children to update their respective replication directories.

28.   (Original) The server of claim 27, further comprising a fifth program for tracking the server's load and to autonomously determine when, on the basis of the server's load, to create or delete a replica of one of the server's files on another server, to create or delete a replica on another server, to update the server's replication directory to add or delete the electronic address of the file on the other server, and to propagate an update request to all parent and children of the server in the replication directory requesting the parent and children to update their respective replication directories.

29.   (Original) The server of claim 28, further comprising a sixth program for updating the status of a server in the replication directory from child status to parent status when the server computer deleting the file is a root of the genealogy tree.

30.   (Original) The server of claim 29, further comprising a seventh program for batching several updates into a single update request.

31.   (Original) The server of claim 30, further comprising a eighth program for transmitting to another server, along with an update request, a local timestamp indicating the time at which an update to the server's replication directory was made, the other server receiving and retaining a record of the timestamp and updating the

replication directory if the last received timestamp is more recent that the retained

timestamp.

32.   (Original) The server of claim 31, further comprising a ninth program

for retaining the timestamp for a limited period of time, the other server updating the

replication directory if a timestamp is received along with an update request and no

timestamp is then retained by the other server.

33.   (Previously Presented) A method of communication between a client

computer and a server computer connected to the client computer by a

communications network, the method comprising the steps of:

(a) detecting a user's selection of a parent file's hyperlink to a desired file;

and

(b) if the hyperlink is associated with a logical reference of the parent file that

identifies the desired file independently of a URL, identifying an electronic address

stored in the parent file that corresponds to the logical reference.

34.   (Previously Presented) The method of claim 33, wherein the parent

file comprises a plurality of electronic addresses corresponding to the logical

reference.

35.   (Previously Presented) The method of claim 34, wherein the

identifying step comprises the step of selecting the electronic address from the

plurality of electronic addresses.

36.   (Previously Presented) A method of communication between a client
computer and a server computer connected to the client computer by a
communications network, the method comprising the steps of:

(a)   detecting a user's selection of a parent file's hyperlink to a desired file;

(b)   identifying a logical reference in the parent file that is associated with
the hyperlink and that identifies the desired file independently of a URL; and

(c)   selecting an electronic address that corresponds to the logical
reference from a list of multiple electronic addresses stored in the parent file.